

## LEVEL 9 COMPUTING

Having spent a significant amount of money on the hardware of your Nascom 2 computer, you may well have tried to find software to run on it... and found a notable lack of quality games and utility programs that you can just load and use without problems.

Level 9 Computing was formed to write and distribute high quality games and utilities to fill this need - utilising the substantial computing experience of its founders.

Level 9 Computing sells programs for the standard Nascom 2<sup>\*</sup> to run under Nas-Sys 1 & 3. BASIC programs use standard ROM BASIC (4.7). All programs are supplied on cassette at both 300 and 1200 baud on each cassette.

The programs are:

- o Properly designed - we have substantial commercial experience in user-interface design to draw upon, and have taken great pains to enhance and 'polish' all programs.
- o Properly documented - all programs are easy to use and self-explanatory, but we include separate documentation anyway.
- o Properly tested - all programs are fully tested before sale and are, as far as possible, bug-free.
- o Properly packaged - we package programs for survival through the post and use TDK D-C46 cassettes. At least you get a free cassette that you can actually use.

Taking all this together, we believe that you will enjoy using any program from Level 9. If you are not happy however, just return the cassette with your reasons, within 14 days of receipt, and we guarantee to return your money.

\* or Nascom 1 with Cottis Blandford cassette interface.

### Order Form

To: Level 9 Computing, 229 Hughenden Road, High Wycombe, Bucks.

Please supply the following:-

TITLE

PRICE

Total    £    \_\_\_\_\_

Name and Address:

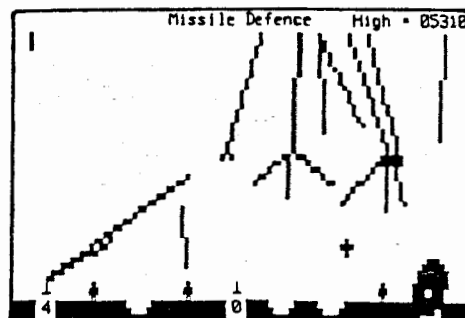
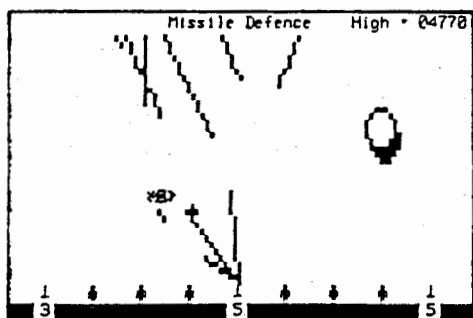
Telephone Number:

### Missile Defence

16K Machine Code. Graphics

£8

Nuclear war has broken out and missiles are descending from all directions. You control the ABM defences which protect the civilian population and your bases from enemy ICBMs, cruise missiles and bombers. As you fight off the ever-increasing numbers in each attack you must decide whether to risk your bases to protect civilians. This fast action game also has a 2 player scenario: as Ron and Leo you divide your 'defence' budgets between attack, defence and reserves and try to 'win' World War 3.

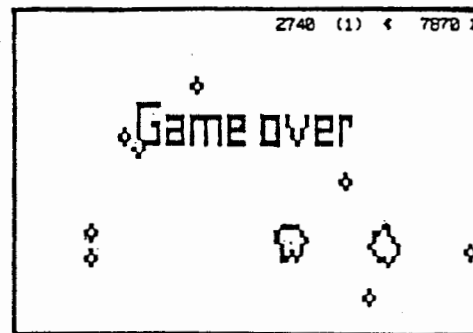
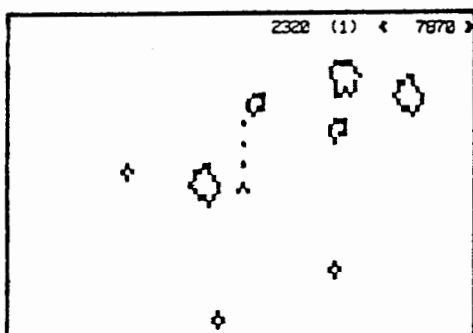


### Asteroids

6K Machine Code. Graphics

£8

You pilot a spaceship menaced by asteroids and enemy spacecraft. The asteroids can be blasted by accurate shooting, but watch out: only the smallest ones are destroyed, large asteroids are split into smaller, faster, more-dangerous pieces. Your spaceship can move to dodge, and even enter hyperspace if trapped. This highly addictive game has 8 skill levels and a Hall of Fame for the 10 best scores and player names. The Hall of Fame can be saved with the program and continued next day to keep your lifetime best. Our highest is 260000...so far!

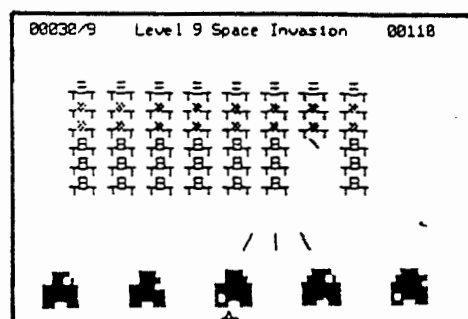
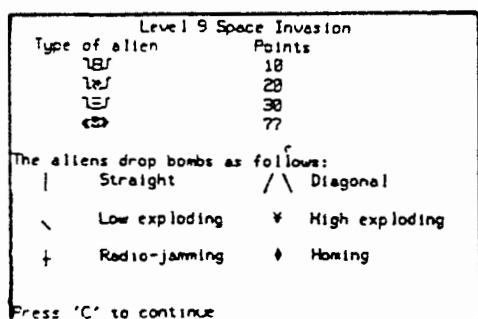


### Space Invasion

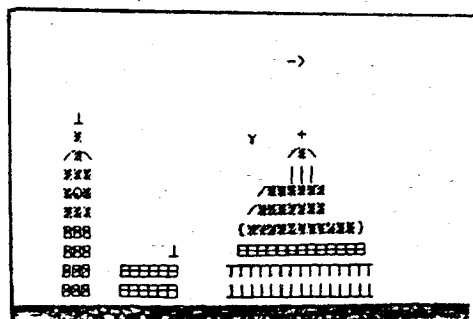
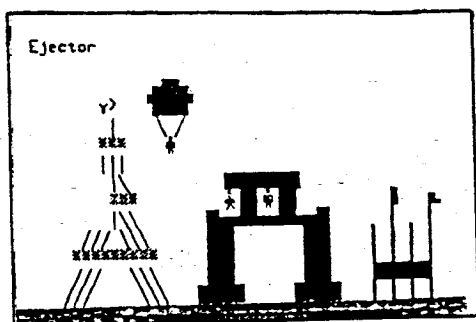
16K Machine Code. Graphics

£7

The aliens are back, armed with new and lethal weapons. This fast action game has 10 speeds, 10 skill levels, optionally descending invaders, space ships and high score display. Missiles include: Homing, Control-jamming, 2 types of Exploding missiles, Commando raids and a few straight-forward missiles. Difficulty ranges from easy to suicidal. An experience.



Flatten your least favorite city with this addictive fast action game, in order to clear a landing strip for your bomber aircraft. Choices of bomb type and aircraft speed are provided and you can bomb London, Paris or New York.

Fantasy

16K BASIC

£6

You are trapped inside a gothic mansion with 25 other characters, realistically controlled by the computer. Everyone is trying to acquire enough treasure to buy entrance to the League of Heroes and theft, bribery and cunning succeed better than all-out aggression. Don't make too many enemies!

Fantasy 81  
 3 - east : a sliding door  
 On the ground is:-  
 1 - a rat pie  
 Also there:-  
 1 - Ena Sharples  
 2 - Maggie Thatcher  
 3 - The Wumpus  
 4 - The Vile Troll  
 Ena Sharples fails to leave via the church door. Maggie Thatcher bites Ena Sharples, she is dying. The Wumpus karate-chops Maggie Thatcher, she is injured. The Vile Troll picks up the rat pie. Gollum enters the chapel via a sliding door.  
 What now?

Fantasy 81  
 1 - a gold medal  
 Also there:-  
 1 - The Old Dragon  
 2 - Maggie Thatcher  
 The Old Dragon picks up the gold medal. Maggie Thatcher karate-chops The Evil Witch, you are slightly hurt.  
 What now? P 1  
 The farm yard holds less than 1 object.  
 The Old Dragon steals a diamond necklace from The Evil Witch. The Old Dragon leaves the farm yard via the bramble thicket. Maggie Thatcher karate-chops The Evil Witch, you are badly injured.  
 What now? \_

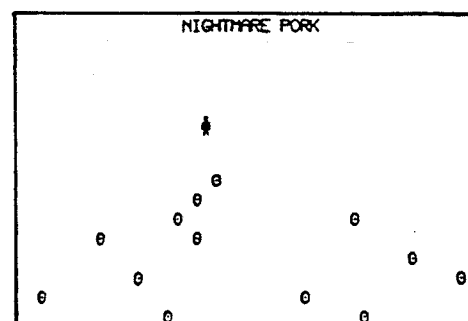
Nightmare Pork

16K BASIC. Graphics

£5

As challenging as Rubik's cube, as exciting as hang-gliding, as rewarding as winning the pools and as absorbing as blotting paper? In this fast action game you cross a deadly pig sty, avoiding its many hazards, to bring home the bacon. You must stop the bacon slicer, dodge the Panicing Porkers, out-guess the Betting Butcher, escape from the Wild Boars, humour the patronising Male Chauvenist Pig etc. etc. Don't kick the bucket! All 13 dangers are games within the main game and require a range of skills to combat, so not only is this game great fun to play but winning is a real achievement. It can be done though, unless you are ham handed or pig headed, sow why not go the diamond neckle hog and sty it!

NIGHTMARE PORK  
 THE BETTING BUTCHER  
 He challenges you to a game of dice with your carcase as the steak.  
 He throws 1 and 1 = 2  
 Will you try for More or Less?



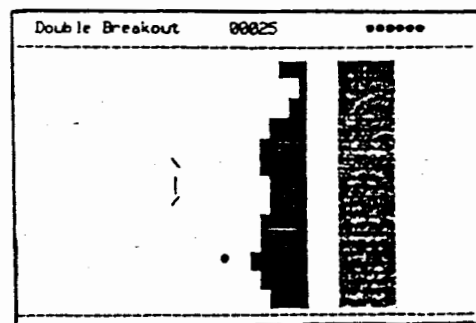
## Games Cassette

The following games: any 3 for £5 or all 5 for £6

### Double Breakout

8K Machine Code. Graphics

Keep the ball in play as it demolishes 2 walls. You control four-way bat movement and have a choice of ball speed and bat shape, and your rating is displayed. This game requires very quick reactions indeed at the higher speeds, as the angle of bounce is unpredictable. If you break through, this earns a faster game..



### Gunner

8K BASIC. Graphics

An unusual and difficult game in which you have to shoot down various targets moving at different heights and speeds, while avoiding the bombs they drop. You control the movement of the gunner and have a choice of 2 angles for missiles. 2 skill levels.

Level 9 GUNNER  
Copyright (C) 1981 Level 9 Computing

In this game you are in charge of a mobile gun unit. Your job is to shoot down enemy planes etc. which are travelling overhead.

There are 3 types of enemy craft:

Appearance	Type	Points
*	reconnaissance aircraft	1
+	killer bomber	3
(*)	barrage balloon	10

How many points to win (e.g 100)? \_

### Hunt the Wumpus

8K BASIC

Hunt the loathly WUMPUS which lurks in a dark maze which is different in every game. Beware the dangerous Super-Bats and deadly pits! And be warned, if you make a sound the WUMPUS will come hunting you! Then, when you've shot one WUMPUS the game is just beginning: can you get the other four before they eat all of your people?

Level 9 Wumpus Hunt \*\*\*\*\*

What now? M9

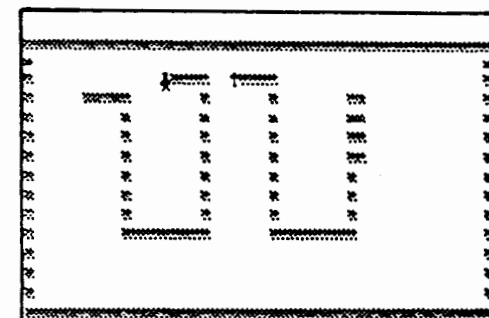
You are in room 9 which has passages to rooms 5, 7 and 6  
You hear LOUD FLAPPING NOISES.  
What now? M5  
GASP! You have been grabbed and carried away by a SUPER-BAT to a different room.  
You hear scratching noises.

You are in room 15 which has passages to rooms 20, 2 and 7  
You feel a COLD DRAUGHT.  
You hear LOUD FLAPPING NOISES.  
What now? \_

### Surround

8K Machine Code

Move a man who leaves tracks behind him. You must surround your opponent with these tracks to prevent him from moving. An arcade-type game for 2 players, or 1 player vs the computer. 9 speed levels: easy(?) to so fast that you daren't blink.



### Minefield

8K BASIC

Cross a deadly minefield, helped only by a dodgy mine-detector which could fail at any moment. This detector reports the number of nearby mines but not their directions: you must guess these or try to work them out. For people who like calculated risks!

Level 9 Minefield

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Moves = 15

There is 1 mine near you.

Adventure games are possibly the most fascinating and addictive type of computer games, but until recently REAL adventures have only been available for machines with disks or a lot of memory - and at high prices. Not any more! Level 9 adventures come in 16K and 32K versions at £8 and £10 respectively - the only difference between versions being the size of the descriptive text.

In an adventure game, the program acts as your eyes and ears to a fantastic world of weird settings, creatures from myth and legend, subtle puzzles, great risks and greater rewards of fabulous treasure.

To play, you simply type in English phrases (e.g WALK INTO THE CAVE, LOOK AROUND, CLIMB DOWN THE LADDER, TAKE ELIXIR etc). As each program has a large vocabulary this makes the games easy to play and gives them a realistic feel.

Each adventure has over 200 individually described locations and large numbers of treasures and creatures - a total of about 500 messages and descriptions. The adventures are very addictive, and so large that a game could take weeks to solve, but fortunately you can save a game at any point to return to everyday life for a while - resuming the game later.

Level 9 Adventures are written in a super-compact language known as 'a-code', and their text descriptions are compressed to a fraction of the normal size for storage. Together, these allow unprecedented features for the size.

#### Colossal Adventure

Colossal Adventure is a complete, full scale version of the original classic mainframe game "Adventure". You will encounter all the treasures, creatures and rooms that you have seen hinted at in readers' letters to computer magazines.

But when you find all of the treasures and start the end-game, it's another matter entirely: an extra 70 new rooms have been added! No one else gives you this bonus.

#### Adventure Quest (from mid-August)

From the great forest, you must cross the burning desert, climb orc mountain, cross the underground lake and brave fire, marsh and illusions on a quest to save Middle Earth from Tyranny.

Use swords, spells and subtlety to combat opponents from dogs to demons, from ghouls to ghosts, and from Wizards to 200 foot worms. No game gives you more.

The only one of its kind for the Nascom, this program enhances Microsoft 4.7 ROM BASIC, adding extra statements and commands. These are used as if they were an integral part of ROM BASIC - it is as if you had bought a more powerful BASIC interpreter that was fully compatible with standard ROM BASIC. There is NO mucking about with USR calls.

Because Extension Basic is fully compatible with standard BASIC, you can use it either as an interpreter in its own right, or as a superb toolkit for producing programs to run under ROM BASIC alone.

The 30 additional keywords provided by Extension Basic include:

Editing Commands:

AUTO	automatically number new lines;
EDIT	edit long lines (up to about 700 characters);
DELETE	deletes a block of lines;
LIST	shows graphic characters in quotes properly, not as keywords;
REDUCE	discard all comments and/or spaces, making program smaller;
RENUMBER	renumbers lines and GOSUB/GOTO/ON/RESTORE references.

Commands to help with Debugging:

DEC & HEX	convert between decimal and hexadecimal numbers;
FIND	find any text string (even if it includes keywords);
SPEED	set repeat keyboard speed;
TRACE	follow program execution, printing line numbers and variables etc;
XLIST & XREF	cross reference listing of selected line(s).

Input Statements:

GET	get value of key pressed, if any;
INKEY	wait for key to be pressed, and return its value;
INLIN	return entire line containing cursor when ENTER pressed;
TEST	report whether specified key is up or down.

Screen Handling Statements:

COPY	copy block of memory (e.g to move the screen);
LINE	set/reset/reverse line between points;
PRINT @	print at specified position;
VDU	print string at position, even on top line;
WRAP ±	prevent any word being split between one line and the next.

Structured Programming Statements:

IF...THEN...ELSE	do one thing if true, another if false;
REPEAT...UNTIL	loop until condition true;
WHILE...WEND	if condition true, loop while it remains true.

Extension Basic is supplied with a 25 page manual, a relocater program so that you can place it anywhere in memory and a demonstration EB program which includes the games Sweeper and Demon Driver. Details of how you can add more keywords of your own are included.

If you buy EB in ROM, please specify type of ROM (2\*2716 or 4\*2708) and state the start address: where you will locate the ROMs. If you initially buy EB on cassette, you can subsequently buy the ROM version for £12.

Note: EB works with Nas-Sys 1 or 3. You are advised not to use it with D-BUG or other toolkits as these can conflict with EB: not that you will need to.

The only one of its kind for the Nascom, this full Z80 assembler compresses program source to half the normal size - allowing bigger programs to fit in memory and speeding up loading/saving the source to cassette or disk.

Compression Assembler is a very sophisticated product, but all the complexities are hidden away and so it is very easy to use. Its other main advantages, in addition to ease-of-use and source compression, are:

- 1) It is very fast: assembling about 2400 lines per minute.
- 2) A printer can be used for listings via the Nas-Sys 'X' command.
- 3) Comprehensive find/change commands are provided for editing.
- 4) The assembler and program source are checksummed. If the program that you are developing corrupts the source during testing (ie it does not do quite what you expected due to a bug and stores values on top of the source), you are warned on returning to the assembler - before further harm can result. Naturally you can ignore the warning if you like.
- 5) Labels can be of any length to allow more readable programs.
- 6) Assembler commands are all single letters - easy to remember and use.

The commands provided are:

- A assemble program;
- B print the line at the beginning of the program (the first line);
- C change occurrence(s) of one string for another: as each string is found, you can choose to replace it and continue, leave it and continue, or stop;
- D delete one or more source line(s);
- E edit (replace) a source line;
- F find occurrence(s) of a string - similar to 'C';
- H set page height for 'L' - the number of lines listed at a time;
- I insert new source lines into the program;
- L list a page of lines on the screen;
- M return to Nas-Sys;
- N return to Nas-Sys;
- O define object code limits;
- P print a source line (which becomes the 'current line');
- R read source from cassette (or disk via Q-DOS etc.);
- S define symbol table limits;
- W write source to cassette (or disk).

The source format used by Compression Assembler is almost identical to that of ZEAP: the de-facto standard for program listings. The only difference is a minor improvement in the treatment of quotes in character constants.

So that you can change to using Compression Assembler without unnecessary fuss, a conversion utility is included to convert source from ZEAP. The source of this utility is also supplied: as an example program and so that you can adapt it to convert from other assemblers.

Compression Assembler is supplied with a 20 page manual describing its use, and a relocater program so that you can move it to any convenient address in memory.

If you buy Compression Assembler in ROM, please specify type of ROM (3\*2716 or 6\*2708) and the address where they will be located. Please also state an address for the 256 byte workspace: we suggest at F000. If you initially buy Compression Assembler on cassette, you can subsequently buy the ROM version for £18.

Q-DOS stands for Quick Disk Operating System. It allows you to save and load files, such as programs, to floppy disk; to run programs directly from disk; to monitor and control disk status; and to write programs using sequential data files. Thus it is comparable with CPM, but more compact (4K+3K buffer), faster, less expensive, and allows continued use of your existing programs.

Q-DOS works with the Gemini G805 drive, or any compatible drive (35 track, double sided, single density and controlled via the HENELEC card). It runs with Nas-Sys 1 or 3 but does not require D-DOS so you will be able to re-use the space taken by this.

Q-DOS files can hold the saved contents of a block of memory (eg a BASIC or assembler program) or arbitrary data. They can be of any size that will fit on a disk, and have two part names: each part being 1-8 characters.

The user commands provided by Q-DOS are:

DIR ..... display directory, for each file this is: name, creation date, start address, and length in bytes;  
 DISK ..... display title of current disk;  
 DRIVE ..... specify number of drive to be used;  
 ERASE ..... delete a file;  
 FREE ..... display amount of free (unused) disk space;  
 LOAD ..... load a block of memory, a BASIC program, or a ZEAP program;  
 LOCK & UNLOCK .... protect/unprotect a file against ERASE or modification;  
 RENAME ..... change name of file;  
 RUN ..... load and execute a machine code program at its start address;  
 SAVE, BSAVE & ZSAVE create a file and save into it: a block of memory (machine code program), a BASIC program; or a ZEAP program.

All commands can also be used by machine code programs. Additionally, such a program can process sequential file(s) - that is:

- open and close file(s) for reading or writing;
- read/write specified numbers of byte(s), with Q-DOS providing automatic buffering to reduce the number of physical disk accesses involved.

Q-DOS is supplied with:

- a 55 page manual covering both simple and sophisticated use;
- a relocater program to specify PIO number, start address and buffer address;
- a formatter program to initialise floppy disks.

The following utilities are optionally provided:

- a back-up program to save all/selected files on a disk to cassette in Nas-Sys format (they could be loaded by R commands, later), and to load files from cassette to floppy disk;
- an un-erase program to recover any file deleted by accident;
- a program to allow you to 'RUN' programs written in ROM BASIC (or EB);
- a recovery program to help cope with any disk hardware faults.

Without utilities, Q-DOS is £5 less than the price above. The optional utilities alone are £8. If you buy Q-DOS on cassette, you can subsequently buy the ROM version for £12. If you buy Q-DOS in ROM, please specify type of ROM (2\*2716 or 4\*2708) and state start and buffer addresses and PIO number (4 on a standard Nascom).

Finally, the reason for the 'Q' in Q-DOS can be seen from the following timings, measured with the disk starting at rest:

File Size:	1K bytes	16K bytes	32K bytes	64K bytes
Time to Load:	1½ seconds	5 seconds	9 seconds	14 seconds (estim.)
Time to Save:	3	7 seconds	11 seconds	16 seconds



Written any programs?

Level 9 Computing is on the lookout for good new programs for the Nascom, and for most other micros. Programs should be original and should work, but we will enhance and document them for sale if necessary. Send a cassette, and we will return it with comments and an offer on royalties.

We pay royalties of up to 33% of the full sale price - before we have taken out money for p&p etc. - but to get this rate your program would need to be comparable in quality with the ones in this catalogue.

Additionally, we are prepared to pay 50% royalties for Extension Basic add-ons, due to the lower cost of marketing these. Again, a program would need to be of high quality to get the full rate.